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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/801,462 | 03/15/2004 | Dimitri C. Argyres | NLMI.P042 | 3222 |
| 30554 | 7590 | 09/21/2007 | | |
| SHEMWELL MAHAMEDI LLP 4880 STEVENS CREEK BOULEVARD SUITE 201 SAN JOSE, CA 95129 | | | EXAMINER PORTKA, GARY J | |
| | | | ART UNIT 2188 | PAPER NUMBER |
| | | | MAIL DATE 09/21/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/801,462 | ARGYRES ET AL. | |
| | Examiner | Art Unit | |
| | Gary J. Portka | 2188 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 17-24, 26-30, 32, 34 and 35 is/are pending in the application.
- 4a) Of the above claim(s) 26-30, 32, 34 and 35 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15 and 17-24 is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2188

DETAILED ACTION

Claims 15, 17, 24, 26, 34, and 35 were amended, claims 16, 25, 31, and 33 were canceled by Applicant. Claims 26-30, 32, and 34-35 are withdrawn as being to a non-elected invention. Claims 1-15 and 17-24 are examined below.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites "the AB logic operation" at line 6. Since there are a plurality of logic operations (as recited at line 4), this lacks clear antecedent basis. Perhaps line 6 should recite "the AB logic operations". Claims 2-14 incorporate this limitation by dependency.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hesson, US Patent 5,808,927.

As to claim 1, Hesson discloses *an apparatus comprising control logic of a plurality of logic cells configured to receive A and B operands and perform logic*

operations of (NOT)A AND B, A AND (NOT)B, and A AND B (see Fig. 4 and col. 6 lines 30-34, where the first XOR circuit is described as including these operations), and switch circuitry coupled to receive input data, and coupled to receive the result of the AB logic operation from the logic cells, and selectively enable output of one or more bits of the input data (CIN, (NOT)CIN) based on the AB logic operation result (see Fig. 4 and col. 6 lines 34-42, where the second XOR circuit is described as receiving the result from the first XOR, and where clearly the output SUM and (NOT)SUM may be considered as the input CIN and (NOT)CIN selectively output based upon the input from the first XOR).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Choi et al., US Patent 5,479,112.

As to claim 1, Choi discloses *an apparatus comprising control logic of a plurality of logic cells configured to receive A and B operands and perform logic operations of (NOT)A AND B, A AND (NOT)B, and A AND B (see Fig. 1, where for example 24 and 30 include a (NOT)A AND B operation, 36 and 42 include a A AND (NOT)B operation, and 60 and 66 include a A AND B operation, also col. 2 lines 30-40, col. 5 line 50 to col. 6 line 18).*

Choi does not specifically describe *switch circuitry coupled to receive input data, and coupled to receive the result of the AB logic operation from the logic cells, and selectively enable output of one or more bits of the input data (CIN, (NOT)CIN) based on the AB logic operation result.* However, it is clear that the output at OOTP is used for something. Anything that this output is connected to would involve some kind of receiver which is affected by the result of OOTP. For example, the output of this gate might be input to another gate whose output depends thereupon. Any such gate could then be considered as having its output as being selectively enabled from its input depending upon the output OOTP. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use the recited switch circuitry to selectively enable output of input data based upon the AB logic operations, because this would be the equivalent of providing further logic in the circuit, which was well known for providing more complex control or related functions.

Allowable Subject Matter

Claims 15 and 17-24 are allowed.

Claims 2-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim (amended to overcome the 35 USC 112 rejection above) and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary J. Portka whose telephone number is (571) 272-4211. The examiner can normally be reached on M-F 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gary J Portka
Primary Examiner
Art Unit 2188

September 17, 2007

GARY PORTKA
PRIMARY EXAMINER

